RICKETTS (B. M.)

Excision of the hip-joint

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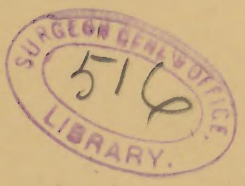

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Excision of the Hip-joint in Tubercular Disease.[1]

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THE practice of excision of the hip-joint does not date back one hundred years, although Schlicting, in 1742, removed pieces of diseased bone from the human hip-joint. Experiments on the lower animals were begun by Charles White, of Manchester, England, in 1770, followed sixteen years later by Vermandois and Chaussier, in 1795. Schmalz, of Pirna, conceived the idea of making a double exsection of the head of the femur upon one of his patients in 1817, but after making his incisions he found that the head of the femur had already been removed by the disease, and consequently he could not claim to be the first to make the operation. Anthony White, of London, seems to have been the first to have made an excision of the femur upon a living human being, a child. Huston made one in 1823, Oppenheim one in 1829, and Lentin one in 1832. Textor made one in each of the years 1834, 1835, 1839 and 1845; the one in 1845 lived. It was this year, 1845, that Ferguson began his renowned series, and up to 1855 he had made four operations with three successes. The operation now, 1855, became general, there having been performed forty-one operations up to 1860 in spite of the opposition of Syme. Roux, 1847, was the first to operate in France, and the patient died, and the operation does not seem to have again been made in that country until 1863, when Beckel operated with success. Ollier, of Lyons, made his first and successful operation in 1868. This was the year that Bonnet's successful career began. Orthopædics was little practised until the introduction of antiseptics, when the operations rapidly multiplied under the Ray Barton method and the Adam's section of the neck subtrochanteric. Volkman began on irreducible luxations in 1878, while Margery, in 1885, endeavored to remedy congenital luxation by resection of the head of the femur.

Charles T. Poor[1] reports sixty-five cases of excision of the hip-joint out of sixty-seven, from 3 to 15 years of age, occurring in hospital practice from 1873 to 1893. Whether this is in St. Mary's Free Hospital alone or not he does not say. There were five erasions; eight trephines of the trochanter major; eleven, the central cavity of the femur was cleaned (abscess in all); fifty-one, the joint was entered over or behind the trochanter major; in fifteen cases the

[1] A paper read before the Cincinnati Academy of Medicine, November 20, 1893.

[1] New York Medical Journal, April 23, 1892.

anterior incision on outer side of crural nerve below one-half an inch internally to anterior superior spine of ilium. In sixty-four cases only one joint was involved, and in three both were involved; thirty-six, the head and neck were removed; twenty-four, made below trochanter major; seven, head alone was removed; thirty six cases, extensive bone lesion; thirty-one, confined to head alone; in ten cases the end of the bone was afterward removed; thirty-five cases, old sinuses curetted owing to tubercular granulations; five erasions performed afterward. Thirty-two were cured, twenty-five died, three returned, two not improved, and five not accounted for.

Ollier gives three principal reasons for the joint being entered: First, acute suppuration, bony or synovial, origin due to any cause. Second, acute tubercular suppuration. Third, arthritis, non-suppurative, but occasioning great pain or deformities by other means. In number one and two resection is the vital indication. Number three not so important; let alone except to walk orthopædically. Do not remove the head for simple synovial fluid or marginal ostitis, or osteo-myelitis of head of bone, but in cocco-femoral articulations, involved by suppuration, the head should always be removed.

The views which I hold concerning hip-joint excisions might be considered radical, and, although I may be classed among the younger surgeons, I feel convinced through my own experience and that of others that even exploratory incisions into the hip-joint are as justifiable as the exploratory incisions into the abdomen of any other cavity. I am also convinced that the indications, as suggested by Ollier, for the operations are the most rational that I have seen. These conditions alone are sufficient to induce the most timid operator to discharge his duty both to himself and patient. It is not a question as to which one of the three stages of hip disease exists. Operative procedures in either of them may be demanded, especially so in the second and third stages; and I might say it is demanded in 90 per cent. of cases in the first stage. If we have evidence that the hip-joint or any other joint is diseased, it is our duty to determine as far as possible to what extent the disease exists. Unfortunately, in hip-joint diseases, as in most other diseases, the primary stage is overlooked. This is the most important time, for in the first stage operative procedure of any kind is most likely to result in good. I do not believe that there is 3 per cent. of tubercular hip-joints that do not result in more or less ankylosis. I am quite sure that no more than 6 per cent. of exploratory incisions in the primary stage would result in ankylosis; I mean, of course, when performed aseptically. If the disease should, after exploratory incision, prove not to be tuberculous, primary union is to be expected. If it should be tuberculous, primary union could not under any circumstances be expected. It is a great question as to the amount of destruction that is to take place when the head of the femur has become diseased even to the slightest degree. The earlier tubercular foci can be removed from the head, neck or shaft of the femur, the shorter will be the duration of the disease and the less the deformity and amount of ankylosis. Even at the present time the majority of operators in this and foreign countries delay any

direct surgical operation until the formation of fistulæ. This, to my mind, is a dreadful state of affairs, and I would most surely condemn such procrastination. Operations under these circumstances can offer but little good as compared to operations in the earlier stages. By this time the patient has become subjected to the various tubercular sequelæ, such as pulmonary infection, amyloid degeneration, etc. The patient has become practically worn out from the pain, loss of sleep, loss of appetite and general infection, besides having, from necessity, been compelled to do without sunshine, out-door exercise and fresh air. Do anything within reason before the second stages of hip-joint disease that will enable a patient to have these advantages. If these cases are allowed to reach the third stage, years are required for a complete recovery if they should live.

If the diseased tissue is removed early, the patient can be allowed to run about *ad libitum* from almost the beginning.

I presented to this Society last spring the head, neck and greater trochanter removed from a boy 5½ years old. That specimen fully demonstrated what exists in what might be called the first stage of tubercular hip disease. I do not believe that there has been any good results following the injection of iodoform into a hip-joint where tuberculosis exists, as in this case. As the majority of cases die sooner or later, perhaps before the age of 25, I do not believe it is wise to subject them to the confinement that must necessarily be in placing the patients in plaster-of-Paris and the various kinds of braces that flail-joint may be avoided, because flail-joint may be the result even when fixation by any means has been resorted to. I do not believe the number of flail-joints is increased by not subjecting the patient to this plan of treatment. It is deplorable that the upper epiphysis of the femur should be removed during a surgical operation; it is surely equally deplorable for life to be destroyed by disease. No man is supposed to remove more than the diseased portion of a bone; that would be criminal, and the operator would subject himself to suit for malpractice. It is supposed that the operator knows abnormal tissue from normal tissue, and unless he does he has no right to do this or any other kind of surgery. Therefore, I maintain that the shortening is no greater in cases that have been operated upon than in cases that have not been operated upon, cases that have been allowed to run their course. Some maintain that the ankylosis as the result of hip-joint disease is different and more substantial than the ankylosis following operative cases. However, be this as it may, I feel that the end justifies the means. I am quite sure that the results in the cases that have come under my observation bear me out in this statement. While the operation of trephining the trochanter and neck has been done, I am sceptical as to the indications for such a procedure. It is absolutely impossible for any man to determine the locality of tubercular foci, especially when they exist within the substance of the bone. I would add that there are three conditions which would permit me to operate: First, to get rid of the disease; second, to avoid infection; third, to relieve pain when other measures have failed.